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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,748	01/23/2004	Christopher J. Zwettler	10333US01	7626

7590 01/12/2006

Attention: Eric D. Levinson
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Legal Affairs
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St. Paul, MN 55164-0898

EXAMINER

HAUGLAND, SCOTT J

ART UNIT PAPER NUMBER

3654

DATE MAILED: 01/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/763,748

Applicant(s)

ZWETTLER, CHRISTOPHER J.

Examiner

Scott Haugland

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>5/7/04</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 9-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 recites the limitation "the slot" on line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Zwettler (U.S. Pat. No. 6,457,664).

Zwettler discloses a data storage cartridge 20 having a tape driven by a drive belt 64 comprising a housing 22 having a driven roller (upper portion of 58 in Fig. 6)

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rotatably mounted in the housing and a driven member (lower portion of 58 in Fig. 6) operatively connected to the driven roller having a drive member engagement surface and a drive member capturing member.

The cartridge of Zwettler is capable of use with the claimed drive and has a drive member engagement surface. The cartridge is capable of use in such a way that insertion of the cartridge in one direction moves a movable drive member of a drive in a perpendicular direction.

With regard to claim 2, the cartridge of Zwettler has a driven member comprising a cylindrical member (lower portion of roller 58 in Fig. 6) connected to the roller (upper portion of roller 58) having angled surfaces (on teeth 100) proximate a second end of the cylindrical member and a slot (formed by a pair of teeth 100) defined in the second end.

With regard to claim 4, the driven roller opening is over the driven member in some orientation of the cartridge.

Claim 12 is rejected under 35 U.S.C. 102(b) as being anticipated by Kimizuka et al (U.S. Pat. No. 4,445,651).

Kimizuka et al discloses a method of engaging a data storage cartridge into a drive having a drive member 42a, 42b, 43a, 43b, 44a, 44b moveable between a first position and a second position, the method comprising: inserting the cartridge into the drive in a first direction, moving the drive member 42a, 42b, 43a, 43b, 44a, 44b from its first position to its second position by movement of the cartridge in the first direction,

movement from the first position to the second position being generally perpendicular to the first direction, moving the drive member back towards its first position when the cartridge is fully inserted, and engaging the drive member to a driven member 31a, 31b on the cartridge. Note col. 5, lines 14-30.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 6, and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zwettler (U.S. Pat. No. 6,457,664) in view of Kimizuka et al (U.S. Pat. No. 4,445,651).

Zwettler is described above.

Zwettler does not explicitly disclose that the drive member is moveable in a first direction by contact with the cartridge or that insertion of the cartridge in the drive in a second direction generally perpendicular to the first direction moves the drive member in the first direction.

Kimizuka et al teaches making a drive member of a cartridge drive moveable in a first direction by contact with a cartridge during insertion of the cartridge in a second direction perpendicular to the first direction.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the cartridge of Zwettler with a driven member moveable in a first direction by contact with the cartridge when the cartridge is inserted into the drive in a second direction generally perpendicular to the first direction as taught by Kimizuka et al to provide a simple mechanism for effecting positive engagement and alignment of the cartridge drive and driven roller.

With regard to claim 6, It would have been obvious to provide a spring as taught by 46a, 46b of Kimizuka et al to bring about engagement of the drive member and roller. The spring is operatively connected to the motor at least through connection with other components of the apparatus. The motor disclosed by Zwettler and Zwettler as modified is above the driven roller opening when the apparatus is some orientation of the apparatus.

With regard to claim 11, the driven roller opening is over the driven member in some orientation of the cartridge.

Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zwettler in view of Kimizuka et al as applied to claims 5 and 6 above, and further in view of Zuckschwert et al (U.S. Pat. No. 3,934,841).

Zwettler does not disclose that the drive motor is moveable.

Zuckschwert et al teaches making a drive motor 4, 5 for a tape cartridge 9 moveable along with a drive member 6, 7 to permit engagement and disengagement of the drive member and the cartridge during loading and unloading.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the motor of Zwettler moveable along with the drive member as taught by Zuckschwert et al to accomplish the required moveability of the drive member.

With regard to claim 8, Zwettler has a driven member comprising a cylindrical member (lower portion of 58 in Fig. 6) connected to the roller (upper portion of 58) having angled surfaces (on teeth 100) proximate a second end of the cylindrical member and a slot (formed by a pair of teeth 100) defined in the second end. Kimizuka et al also teaches these structures.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Clever et al (U.S. Pat. No. 3,865,331) is cited to show a tape cartridge drive having axially moveable drive members. Cohen et al (U.S. Pat. No. 3,924,823), Rose (U.S. Pat. No. 4,199,092), Ohkubo et al (U.S. Pat. No. 5,372,321), and Spears et al (U.S. Pat. No. 6,043,953) are cited to show tape drives having spring biased drive motors. Zwettler (U.S. Pat. No. 6,249,401) is cited to show a tape cartridge having belt driven reels and a roller driven by an axially aligned drive member.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Haugland whose telephone number is (571) 272-6945. The examiner can normally be reached on Monday - Thursday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on (571) 272-6951. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

sjh
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1/4/06

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